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FORM PTO-1449	Atty. Docket No.: C382.12-0111	Appl. No.: 10/073,378
 <p>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</p>	First Named Inventor:	
	Keith S. Champlin	
	Filing Date	Group Art:
	February 8, 2002	2838

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	AA	6,392,414	5/21/02	Bertness	324	429
LL	AB	6,417,669	7/9/02	Champlin	324	426
LL	AC	6,424,158	7/23/02	Klang	324	433
LL	AD	6,441,585	8/17/02	Bertness	320	132
LL	AE	6,445,158	9/3/02	Bertness et al.	320	104
LL	AF	6,384,608	5/7/02	Namaky	324	425
LL	AG	6,388,448	5/14/02	Cervas	324	426
LL	AH	6,307,349	10/23/01	Koenck et al.	320	112
LL	AI	6,411,098	6/25/02	Laletin	324	436
LL	AJ	6,456,045	9/24/02	Troy et al.	320	139
	AK					
	AL					
	AM					
	AN					

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	AO	RU 2089015-C1	8/27/97	Russia		Abstract Only
LL	AP	09061505	3/7/97	Japan		Abstract Only
LL	AQ	10056744	2/24/98	Japan		Abstract Only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	
AS	

EXAMINER:

Kawamura Ruk

DATE CONSIDERED:

8/18/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

Atty. Doct No.:
C382.12-0111

Serial No.:

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION
DISCLOSURE STATEMENT

Applicant:

Keith S. Champlin

Filing Date

Group Art:

February 8, 2002

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	AA	2,514,745	7/11/50	Dalzell	171	95
LL	AB	3,562,634	2/9/71	Latner	31	04
LL	AC	5,589,757	12/31/96	Klang	320	22
LL	AD	5,656,920	8/12/97	Cherng et al.	320	31
LL	AE	6,009,369	12/28/99	Boisvert et al.	701	99
LL	AF	4,968,942	11/6/90	Palanisamy	324	430
LL	AG	5,895,440	4/20/99	Proctor et al.	702	63
LL	AH	4,659,977	4/21/87	Kissel et al.	320	64
LL	AI	4,913,116	4/3/90	Katogi et al.	123	425
LL	AJ	5,160,881	11/3/92	Schramm et al.	322	7
LL	AK	5,338,515	8/16/94	Dalla Betta et al.	422	95
LL	AL	5,537,967	7/23/96	Tashiro et al.	123	792.1
LL	AM	5,548,273	8/20/96	Nicol et al.	340	439
LL	AN	5,747,909	5/5/98	Syverson et al.	310	156

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
AO						
AP						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AQ	
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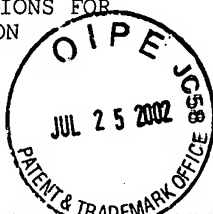
Lawrence L. Lick

DATE CONSIDERED:

8/18/03

AMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 99; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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2838

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
KL	BA	6,114,834	9/5/00	Parise	320	109
KL	BB	6,150,793	11/21/00	Lesesky et al.	320	104
KL	BC	3,876,931	4/8/75	Godshalk	324	29.5
KL	BD	5,347,163	9/13/94	Yoshimura	307	66
KL	BE	5,939,861	8/17/99	Joko et al.		
KL	BF	5,339,018	8/16/94	Brokaw	320	35
KL	BG	5,412,323	5/2/95	Kato et al.	324	429
KL	BH	5,426,416	6/20/95	Jefferies et al.	340	664
KL	BI	5,825,174	10/20/98	Parker	324	106
KL	BJ	5,939,855	8/17/99	Proctor et al.	320	104
KL	BK	5,254,952	10/19/93	Salley et al.	324	429
KL	BL	4,217,645	8/12/80	Barry et al.	364	483
KL	BM	4,633,418	12/30/86	Bishop	364	554
KL	BN	5,321,626	6/14/94	Palladino	364	483
KL	BO	5,969,625	10/19/99	Russo	340	636
KL	BP	6,222,369	4/24/01	Champlin	324	430
KL	BQ	6,225,808	5/1/01	Varghese et al.	324	426
KL	BR	6,249,124	6/19/01	Bertness	324	426
KL	BS	6,259,254	7/10/01	Klang	324	427
KL	BT	6,262,563	7/17/01	Champlin	320	134
KL	BU	6,294,896	9/25/01	Champlin	320	134
KL	BV	6,294,897	9/25/01	Champlin	320	153

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
KL	BW	4-8636	1/13/92	Japan			X (Abstract)
KL	BX	6302776	2/5/88	Japan			Abstract Only

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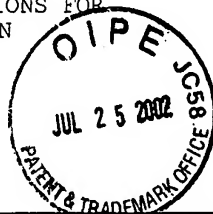
Lawrence Rule

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	JP 4,379,989	4/12/83	Kurz et al.	320	26	
LL	JQ 4,680,528	7/14/87	Mikami et al.	320	32	
LL	JR 5,633,985	5/27/97	Severson et al.	395	2.76	
LL	JS 5,739,667	4/14/98	Matsuda et al.	320	5	
LL	JT 4,024,953	5/1997	Nailor, III	206	344	
LL	JU 6,250,973	6/2001	Lowery et al.	439	763	
LL	JV 6,254,438	7/2001	Gaunt	439	755	
LL	JW 6,304,087	10/16/01	Bertness	324	426	
LL	JX 6,310,481	10/30/01	Bertness	324	430	
LL	JY 6,313,607	11/6/01	Champlin	320	132	
LL	JZ 6,313,608	11/6/01	Varghese et al.	32	132	
LL	KA 6,316,914	11/13/01	Bertness	320	134	
LL	KB 5,435,185	7/25/95	Eagan	73	587	
LL	KC 5,445,026	8/29/95	Eagan	73	591	
LL	KD 4,667,143	5/19/87	Cooper et al.	320	22	
LL	KE 4,847,547	7/11/89	Eng, Jr. et al.	320	35	
LL	KF 5,574,355	11/12/96	McShane et al.	320	39	
LL	KG 4,663,580	5/5/87	Wortman	320	35	

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	KH	WO 99/23738	5/14/99	WIPO			X
LL	KI	WO 94/05069	3/3/94	PCT			X

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	KJ	National Semiconductor Corporation, "High Q Notch Filter", 3/69, Linear Brief 5, March 1969.
LL	KK	Burr-Brown Corporation, "Design A 60 Hz Notch Filter with the UAF42", 1/94, AB-071, 1994.
LL	KL	National Semiconductor Corporation, "LMF90-4 th -Order Elliptic Notch Filter", 12/94; RRD-B30M115, December 1994.

EXAMINER:

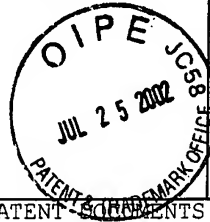
Lawrence R. K.

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Keith S. Champlin

Filing Date

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Group Art:

2838

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
HL	KM	6,323,650	11/27/01	Bertness et al.	324	426
HL	KN	6,329,793	12/11/01	Bertness et al.	320	132
HL	KO	6,331,762	12/18/01	Bertness	320	134
HL	KP	6,332,113	12/18/01	Bertness	702	63
HL	KQ	4,297,639	10/27/81	Branham	324	429
HL	KR	5,653,659	8/5/97	Kunibe et al.	477	111
HL	KS	6,161,640	12/19/00	Yamaguchi	180	65.8
HL	KT	4,351,405	6/28/82	Fields et al.	180	65
HL	KU	6,359,441	3/16/02	Bertness	324	426
HL	KV	4,047,091	9/1997	Hutchines et al.	363	59
HL	KW	4,351,405	9/1982	Fields et al.	180	65
HL	KX	5,653,659	8/1997	Kunibe et al.	477	111
HL	KY	5,637,978	6/1997	Kellett et al.	320	2
HL	KZ	5,095,223	3/1992	Thomas	307	110
HL	LA	5,194,799	3/1993	Tomantschger	320	2
HL	LB	5,754,417	5/1998	Nicollini	363	60

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
LC						
LD						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

HL	LE	"Alligator Clips with Wire Penetrators" J.S. Popper, Inc. product information, downloaded from http://www.jspopper.com/ , undated
HL	LF	"#12: LM78S40 Simple Switcher DC to DC Converter", ITM e-Catalog, downloaded from http://www.pcbcafe.com , undated
HL	LG	"Simple DC-DC Converts Allows Use of Single Battery", <u>Electronix Express</u> , downloaded from http://www.elexp.com/t_dc-dc.htm , undated

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
<i>HL</i>	LH	5,818,234	10/1998	McKinnon	324	433
<i>HL</i>	LI	6,140,797	10/2000	Dunn	320	105
<i>HL</i>	LJ	6,161,640	12/2000	Yamaguchi	180	65.5
<i>HL</i>	LK	6,181,545	1/2001	Amatucci et al.	361	502
<i>HL</i>	LM	6,346,795	2/2002	Haraguchi et al.	320	136
<i>HL</i>	LN	6,347,958	2/2002	Tsai	439	488
<i>HL</i>	LO	6,351,102	2/26/02	Troy	320	139
<i>HL</i>	LP	6,359,441	3/19/02	Bertness	324	426
<i>HL</i>	LQ	6,363,303	3/26/02	Bertness	701	29
<i>HL</i>	LR	5,037,778	8/6/91	Stark et al.	437	216
<i>HL</i>	LS	6,144,185	11/7/00	Dougherty et al.	320	132
<i>HL</i>	LT	5,711,648	1/27/98	Hammerslag	414	786
<i>HL</i>	LU	5,927,938	7/27/99	Hammerslag	414	809
<i>HL</i>	LV	5,951,229	9/14/99	Hammerslag	414	398
<i>HL</i>	LW	5,961,561	10/5/99	Wakefield, II	701	29
<i>HL</i>	LX	5,961,604	10/5/99	Anderson et al.	709	229
<i>HL</i>	LY	6,236,332	5/22/01	Conkright et al.	340	825.06
<i>HL</i>	LZ	6,351,102	2/26/02	Troy	320	139
<i>HL</i>	MA	6,363,303	3/26/02	Bertness	701	29

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
MB						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>HL</i>	MC	"DC-DC Converter Basics", Power Designers, downloaded from http://www.powderdesigners.com/InforWeb.design_center/articles/DC-DC/converter.shtm , undated
	MD	

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U.S. PATENT & TRADEMARK OFFICE

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
11 ME	4,665,370	5/1987	Holland	324	429	
11 MF	4,361,809	11/1982	Bil et al.	324	426	
	MG					
	MH					
	MI					
	MJ					
	MK					
	ML					
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	MT					
	MU					
	MV					
	MW					

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
MX						
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
MY						
MZ						


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Lawrence Loh

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	Keith S. Champlin	
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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	AA	3,593,099	7/13/71	Scholl	320	13
LL	AB	3,607,673	9/21/71	Seyl	204	1
LL	AC	3,676,770	7/11/72	Sharaf et al.	324	29.5
LL	AD	3,729,989	5/1/73	Little	73	133
LL	AE	3,753,094	8/14/73	Furuishi et al.	324	29.5
LL	AF	3,808,522	4/30/74	Sharaf	324	29.5
LL	AG	3,811,089	5/14/74	Strezelewicz	324	170
LL	AH	3,873,911	3/25/75	Champlin	324	29.5
LL	AI	3,886,443	5/27/75	Miyakawa et al.	324	29.5
LL	AJ	3,889,248	6/10/75	Ritter	340	249
LL	AK	3,906,329	9/16/75	Bader	320	44

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	AL	59-17892	1/30/84	Japan			Abstract Only
LL	AM	59-17893	1/30/84	Japan			Abstract Only
LL	AN	59-17894	1/30/84	Japan			Abstract Only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	AO	"Electrochemical Impedance Spectroscopy in Battery Development and Testing", <u>Batteries International</u> , April 1997, pgs. 59 and 62-63.				
LL	AP	"Battery Impedance", by E. Willihnganz et al., <u>Electrical Engineering</u> , September 1959, pgs. 922-925.				
LL	AQ	"Determining The End of Battery Life", by S. DeBardelaben, <u>IEEE</u> , 1986, pgs. 365-368.				
LL	AR	"A Look at the Impedance of a Cell", by S. Debardelaben, <u>IEEE</u> , 1988, pgs. 394-397.				


EXAMINER:

Lawrence Luke

DATE CONSIDERED:

8/12/03

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<p>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</p> 	First Named Inventor:	
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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	AT 3,909,708	9/30/75	Champlin	324	29.5	
LL	AU 3,936,744	2/3/76	Perlmutter	324	158	
LL	AV 3,946,299	3/23/76	Christianson et al.	320	43	
LL	AW 3,947,757	3/30/76	Grube et al.	324	28	
LL	AX 3,969,667	7/13/76	McWilliams	324	29.5	
LL	AY 3,979,664	9/7/76	Harris	324	17	
LL	AZ 3,984,762	10/5/76	Dowgiallo, Jr.	324	29.5	
LL	BA 3,984,768	10/5/76	Staples	324	62	
LL	BB 4,008,619	2/22/77	Alcaide et al.	73	398	
LL	BC 4,053,824	10/11/77	Dupuis et al.	324	29.5	
LL	BD 4,070,624	1/24/78	Taylor	327	158	
LL	BE 4,086,531	4/25/78	Bernier	324	158	

FOREIGN PATENT DOCUMENTS


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LL	BF	60225078	11/9/85	Japan			Abstract Only
LL	BG	04372536	12/25/92	Japan			Abstract Only
LL	BH	04131779	5/6/92	Japan			Abstract Only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	BI	"The Impedance of Electrical Storage Cells", by N.A. Hampson et al., <u>Journal of Applied Electrochemistry</u> , 1980, pgs. 3-11.
LL	BJ	"A Package for Impedance/Admittance Data Analysis", by B. Boukamp, <u>Solid State Ionics</u> , 1986, pgs. 136-140.
LL	BK	"Precision of Impedance Spectroscopy Estimates of Bulk, Reaction Rate, and Diffusion Parameters", by J. Macdonald et al., <u>J. Electroanal. Chem.</u> , 1991, pgs. 1-11.

EXAMINER: *Ranran RL*DATE CONSIDERED: *8/12/03*

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LL	BL	4,112,351	9/5/78	Back et al.	324	16
LL	BM	4,114,083	9/12/78	Benham et al.	320	39
LL	BN	4,126,874	11/21/78	Suzuki et al.	354	60
LL	BO	4,178,546	12/11/79	Hulls et al.	324	158
LL	BP	4,193,025	3/11/80	Frailing et al.	324	427
LL	BQ	4,207,611	6/10/80	Gordon	364	580
LL	BR	4,315,204	2/9/82	Sievers et al.	322	28
LL	BS	4,316,185	2/16/82	Watrous et al.	340	636
LL	BT	4,322,685	3/30/82	Frailing et al.	324	429
LL	BU	4,363,407	12/14/82	Barkler et al.	209	3.3
LL	BV	4,369,407	1/18/83	Korbell	324	416
LL	BW	4,412,169	10/25/83	Dell'Orto	320	64

FOREIGN PATENT DOCUMENTS

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LL	BY	03274479	12/5/91	Japan			Abstract Only
LL	BZ	5216550	8/27/93	Japan			Abstract Only
LL	CA	59017894	1/30/84	Japan			Abstract Only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	CB	"Internal Resistance: Harbinger of Capacity Loss in Starved Electrolyte Sealed Lead Acid Batteries, by Vaccaro, F.J. et al., AT&T Bell Laboratories, 1987 IEEE, Ch. 2477, pp. 128,131.
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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	CC	4,390,828	6/28/83	Converse et al.	320	32
LL	CD	4,392,101	7/5/83	Saar et al.	320	20
LL	CE	4,396,880	8/2/83	Windebank	320	21
LL	CF	4,408,157	10/4/83	Beaubien	324	62
LL	CG	4,423,378	12/27/83	Marino et al.	324	427
LL	CH	4,423,379	12/27/83	Jacobs et al.	324	429
LL	CI	4,424,491	1/3/84	Bobbett et al.	324	433
LL	CJ	4,459,548	7/10/84	Lentz et al.	324	158
LL	CK	4,514,694	4/30/85	Finger	324	429
LL	CL	4,520,353	5/28/85	McAuliffe	340	636
LL	CM	4,667,279	5/19/87	Maier	363	46
LL	CN	4,678,998	7/7/87	Muramatsu	324	427
LL	CO	4,679,000	7/7/87	Clark	324	428
LL	CP	4,697,134	9/29/87	Burkum et al.	320	48

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	CQ	EP 0 772 056 A1	5/7/97	EPO		X
LL	CR	EO 0 637 754 A1	2/8/95	EPO		X
LL	CS	2 088 159 A	6/3/82	Great Britain		X

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	CT	IEEE Recommended Practice For Maintenance, Testings, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations, The Institute of Electrical and Electronics Engineers, Inc., ANSI/IEEE Std. 450-1987, 3/9/1987, pp. 7-15.
LL	CU	"Field and Laboratory Studies to Assess the State of Health of Valve-Regulated Lead Acid Batteries: Part I Conductance/Capacity Correlation Studies", by D. Feder et al., IEEE, August 1992, pgs. 218-233.

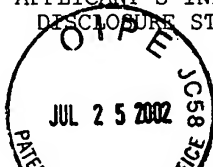
EXAMINER:

Lawrence Ruk

DATE CONSIDERED:

8/12/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449	Atty. Docket No.: C382.12-0111	Appl. No.: 10/073,378
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT 	First Named Inventor:	
	Keith S. Champlin	
	Filing Date	Group Art:
	February 8, 2002	2838

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	CV	4,707,795	11/17/87	Alber et al.	364	550
LL	CW	4,709,202	11/24/87	Koenck et al.	320	43
LL	CX	4,710,861	12/1/87	Kanner	363	46
LL	CY	4,719,428	1/12/88	Liebermann	324	436
LL	CZ	4,743,855	5/10/88	Randin et al.	324	430
LL	DA	4,816,768	3/28/89	Champlin	324	428
LL	DB	4,820,966	4/11/89	Fridman	320	32
LL	DC	4,825,170	4/25/89	Champlin	324	436
LL	DD	4,849,700	7/18/89	Morioka et al.	324	427
LL	DE	4,881,038	11/14/89	Champlin	324	426
LL	DF	4,912,416	3/27/90	Champlin	324	430
LL	DG	4,929,931	5/29/90	McCuen	340	636
LL	DH	4,931,738	6/5/90	MacIntyre et al.	324	435
LL	DI	4,947,124	8/7/90	Hauser	324	430
LL	DJ	4,956,597	9/11/90	Heavey et al.	320	14
LL	DK	4,968,941	11/6/90	Rogers	324	428

FOREIGN PATENT DOCUMENTS


		Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	DL	WO 93/22666	11/11/93	WIPO			X
LL	DM	WO 98/58270	12/23/98	WIPO			X

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	DN	"Battery Impedance", by E. Willihnganz et al., <u>Electrical Engineering</u> , September 1959, pgs. 922-925.
LL	DO	"JIS Japanese Industrial Standard-Lead Acid Batteries for Automobiles", <u>Japanese Standards Association UDC</u> , 621.355.2:629.113.006, Nov. 1995.

EXAMINER: *Lawrence F. Fike*DATE CONSIDERED: *8/12/03*

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
RL	DP	5,004,979	4/2/91	Marino et al.	324	160
LL	DQ	5,032,825	7/16/91	Xuznicki	340	636
LL	DR	5,047,722	9/10/91	Wurst et al.	324	430
LL	DS	5,087,881	2/11/92	Peacock	324	378
LL	DT	5,126,675	6/30/92	Yang	324	435
LL	DU	5,140,269	8/18/92	Champlin	324	433
LL	DV	5,144,248	9/1/92	Alexandres et al.	324	428
LL	DW	5,170,124	12/8/92	Blair et al.	324	434
LL	DX	5,204,611	4/20/93	Nor et al.	320	21
LL	DY	5,214,370	5/25/93	Harm et al.	320	35
LL	DZ	5,214,385	5/25/93	Gabriel et al.	324	434
LL	EA	5,241,275	8/31/93	Fang	324	430
LL	EB	5,254,952	10/19/93	Salley et al.	324	429
LL	EC	5,281,919	1/25/94	Palanisamy	324	427
LL	ED	5,281,920	1/25/94	Wurst	324	430
LL	EE	5,295,078	3/15/94	Stich et al.	364	483
LL	EF	5,298,797	3/29/94	Redl	307	246
LL	EG	5,300,874	4/5/94	Shimamoto et al.	320	15
LL	EH	5,302,902	4/12/94	Groehl	324	434


FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
EI						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EJ	
EXAMINER: <i>Lawrence R. R.</i>	DATE CONSIDERED: <i>8/12/03</i>

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
EL	EK	5,331,268	7/19/94	Patino et al.	320	20
EL	EL	5,336,993	8/9/94	Thomas et al.	324	158.1
EL	EM	5,352,968	10/4/94	Reni et al.	320	35
EL	EN	5,343,380	8/30/94	Champlin	363	46
EL	EO	5,365,160	11/15/94	Leppo et al.	320	22
EL	EP	5,365,453	11/15/94	Startup et al.	364	481
EL	EQ	5,381,096	1/10/95	Hirzel	324	427
EL	ER	5,426,371	6/20/95	Salley et al.	324	429
EL	ES	5,432,426	7/11/95	Yoshida	320	20
EL	ET	5,434,495	7/18/95	Toko	320	44
EL	EU	5,442,274	8/15/95	Tamai	320	23
EL	EV	5,457,377	10/10/95	Jonsson	320	5
EL	EW	5,449,996	9/12/95	Matsumoto et al.	320	20
EL	EX	5,449,997	9/12/95	Gilmore et al.	320	39
EL	EY	5,485,090	1/16/96	Stephens	324	433
EL	EZ	5,519,383	5/21/96	De La Rosa	340	636
EL	FA	5,528,148	6/18/96	Rogers	324	426
EL	FB	5,550,485	8/27/96	Falk	324	772
EL	FC	5,561,380	10/1/96	Sway-Tin et al.	324	509


FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
FD						

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER: <i>Lawrence R. R.</i>	DATE CONSIDERED: <i>8/12/03</i>

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
RL	FF	5,562,501	10/8/96	Kinoshita et al.	439	852
RL	FG	5,572,136	11/5/96	Champlin	324	426
RL	FH	5,574,355	11/12/96	McShane et al.	320	39
RL	FI	5,585,728	12/17/96	Champlin	324	427
RL	FJ	5,592,093	1/7/97	Klingbiel	324	426
RL	FK	5,596,260	1/21/97	Moravec et al.	320	30
RL	FL	5,598,098	1/28/97	Champlin	324	430
RL	FM	5,602,462	2/11/97	Stich et al.	323	258
RL	FN	5,606,242	2/25/97	Hull et al.	320	48
RL	FO	5,621,298	4/15/97	Harvey	320	5
RL	FP	5,642,031	6/24/97	Brotto	320	21
RL	FQ	5,650,937	7/22/97	Bounaga	364	483
RL	FR	5,652,501	7/29/97	McClure et al.	320	17
RL	FS	5,675,234	10/7/97	Greene	320	15
RL	FT	5,677,077	10/14/97	Faulk	429	90
RL	FU	5,699,050	12/16/97	Kanazawa	340	636
RL	FV	5,701,089	12/23/97	Perkins	327	772
RL	FW	5,717,336	2/10/98	Basell et al.	324	430
RL	FX	5,757,192	5/26/98	McShane et al.	324	427


FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
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FZ	
EXAMINER:	Lawrence R. R. R.
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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	GA	5,773,978	6/30/98	Becker	324	430
LL	GB	5,789,899	8/4/98	van Phuoc et al.	320	30
LL	GC	5,793,359	8/11/98	Ushikubo	345	169
LL	GD	5,821,756	10/13/98	McShane et al.	324	430
LL	GE	5,831,435	11/3/98	Troy	324	426
LL	GF	5,872,443	2/16/99	Williamson	320	21
LL	GG	5,914,605	6/22/99	Bertness	324	430
LL	GH	5,945,829	8/31/99	Bertness	324	430
LL	GI	3,356,936	12/5/67	Smith	324	29.5
LL	GJ	5,488,300	1/30/96	Jamieson	324	432
LL	GK	6,002,238	12/14/99	Champlin	320	134
LL	GL	6,037,777	3/14/00	Champlin	324	430
LL	GM	6,051,976	4/18/00	Bertness	324	426
LL	GN	6,081,098	6/27/00	Bertness et al.	320	134
LL	GO	6,091,245	7/18/00	Bertness	324	426
LL	GP	6,104,167	8/15/00	Bertness et al.	320	132
LL	GQ	6,137,269	10/24/00	Champlin	320	150

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	GR DE 29 26 716 B1	1/15/81	Germany			X
LL	GS 0 022 450 A1	1/21/81	EPO			X

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

LL	GT	"Performance of Dry Cells", by C. Hambuechen, Preprint of <u>Am. Electrochem. Soc.</u> , April 18-20, 1912, paper No. 19, pgs. 1-5.
LL	GU	"A Bridge for Measuring Storage Battery Resistance", by E. Willihncanz, <u>The Electrochemical Society</u> , preprint 79-20, April 1941, pgs. 253-258.

EXAMINER:

Lawrence Rude

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	GW	4,379,990	4/12/83	Sievers et al.	322	99
LL	GX	5,144,218	9/1/92	Bosscha	320	44
LL	GY	5,315,287	5/24/94	Sol	340	455
LL	GZ	5,469,043	11/21/95	Cherng et al.	320	31
LL	HA	5,546,317	8/13/96	Andrieu	364	481
LL	HB	5,583,416	12/10/96	Klang	320	22
LL	HE	5,710,503	1/20/98	Sideris et al.	320	6
LL	HF	5,760,587	6/2/98	Harvey	324	434
LL	HG	5,808,469	9/15/98	Kopera	324	43.4
LL	HH	6,008,652	12/28/99	Theofanopoulos et al.	324	434
LL	HJ	6,031,354	2/29/00	Wiley et al.	320	116
LL	HK	6,037,751	3/14/00	Klang	320	160
LL	HL	6,072,299	6/6/00	Kurie et al.	320	112
LL	HM	6,094,033	7/25/00	Ding et al.	320	132
LL	HN	6,163,156	12/19/00	Bertness	324	426
LL	HO	6,172,483	1/9/01	Champlin	320	134
LL	HP	6,172,505	1/9/01	Bertness	324	430

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	HQ	2 749 397	12/5/97	France		X
LL	HR	59215674	12/5/84	Japan		Abstract Only

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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Lawrence Holt

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U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
LL	HT	3,989,544	11/2/76	Santo	429	65
LL	HU	4,745,349	5/17/88	Palanisamy et al.	320	22
LL	HV	4,876,495	10/24/89	Palanisamy et al.	320	18
LL	HW	4,937,528	6/26/90	Palanisamy	324	430
LL	HY	5,179,335	1/12/93	Nor	320	21
LL	HZ	5,266,880	11/30/93	Newland	320	14
LL	IA	5,451,881	9/19/95	Finger	324	433
LL	IB	5,705,929	1/6/98	Caravello et al.	324	430
LL	IC	5,717,937	2/10/98	Fritz	395	750.01
LL	ID	5,862,515	1/19/99	Kobayashi et al.	702	63
LL	IF	5,929,609	7/27/99	Joy et al.	322	25
LL	IG	6,072,300	6/6/00	Tsuji	320	116

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
LL	IO	62-180284	8/7/87	Japan			Abstract
LL	IP	7-128414	5/19/95	Japan			Abstract

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